R<sup>3</sup> is selected from the group consisting of hydrogen, halogen,  $(C_1-C_6)$ alkyl,  $(C_2-C_6)$ alkenyl,  $(C_2-C_6)$ alkynyl,  $(C_1-C_6)$ alkynyl, (C<sub>4</sub>)alkoxy, —B(OH)<sub>2</sub>, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl(C<sub>1</sub>-C<sub>4</sub>)alkyl-, (C<sub>6</sub>-C<sub>10</sub>)bicycloalkyl, heterocycloalkyl, heterocycloalkyl(C1-C4)alkyl-, phenyl, phenyl $(C_1-C_2)$ alkyl, heteroaryl, heteroaryl $(C_1-C_2)$ alkyl, cyano,  $-C(O)R^a$ ,  $-CO_2R^a$ ,  $-C(O)NR^aR^{\overline{b}}$ ,  $-C(O)NR^aNR^aR^b$ ,  $--S(O)R^a$ ,  $-SO_2NR^aR^b, \text{ nitro, } -NR^aR^b, R^aR^bN(C_1-C_4)\text{alkyl-,} \\ -NR^aC(O)R^b, -NR^aC(O)NR^aR^b, -NR^aC(O)OR^a, \\ -NR^aSO_2R^b, -NR^aSO_2NR^aR^b, -NR^aNR^aR^b,$  $-NR^aNR^aC(O)R^b$ ,  $-NR^aNR^aC(O)NR^aR^b$ ,  $-NR^aN R^aC(O)OR^a$ ,  $-OR^a$ ,  $R^aO(C_1-C_4)$ alkyl-,  $R^aO(C_3-C_6)$ alkynyl-,  $-OC(O)R^a$ , and  $-OC(O)NR^aR^b$ , wherein each cycloalkyl, bicycloalkyl, heterocycloalkyl, phenyl, or heteroaryl group is optionally substituted 1, 2, or 3 times, independently, by  $R^c$ — $(C_1-C_6)$ alkyl-O—,  $R^c$  $(C_1-C_6)$ alkyl-S—,  $R^c$ — $(C_1-C_6)$ alkyl-,  $(C_1-C_4)$ alkylheterocycloalkyl-, halogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>6</sub>)cyhalo( $C_1$ - $C_6$ )alkyl, cyano, — $C(O)R^a$ — $C(O)NR^aR^b$ , — $S(O)R^a$ , — $SO_2R^a$ cloalkyl,  $--C(O)R^a$  $-C(O)NR^aR^b$ ,  $-CO_2R^a$  $-SO_2^2NR^aR^b$ , nitro,  $-NR^aR^b$ ,  $-NR^aC(O)R^b$  $\begin{array}{lll} -NR^aC(O)NR^aR^b, & -NR^aC(O)OR^a, & -NR^aSO_2R^b, \\ -NR^aSO_2NR^aR^b, & -OR^a, & -OC(O)R^a, & -OC(O) \end{array}$ NR<sup>a</sup>R<sup>b</sup>, heterocycloalkyl, phenyl, heteroaryl, phenyl  $(C_1-C_2)$ alkyl, or heteroaryl $(C_1-C_2)$ alkyl;

 $R^4$  is hydrogen,  $(C_1-C_4)$ alkyl, or hydroxy $(C_2-C_4)$ alkyl-; each  $R^c$  is independently — $S(O)R^a$ , — $SO_2R^a$ , — $NR^aR^b$ , — $NR^aC(O)OR^a$ , — $NR^aSO_2R^b$ , or — $CO_2R^a$ ; and

- $R^a$  and  $R^b$  are each independently hydrogen,  $(C_1-C_4)$ alkyl,  $hydroxy(C_1-C_4)alkyl-, (C_1-C_4)alkoxy(C_1-C_4)alkyl-,$ (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>6</sub>-C<sub>10</sub>)bicycloalkyl, heterocycloalkyl, phenyl, phenyl(C<sub>1</sub>-C<sub>2</sub>)alkyl-, heteroaryl(C<sub>1</sub>-C<sub>4</sub>)alkyl-, or heteroaryl, wherein any said cycloalkyl, bicycloalkyl, heterocycloalkyl, phenyl, or heteroaryl group is optionally substituted 1, 2, or 3 times, independently, by halogen, hydroxyl, (C<sub>1</sub>-C<sub>4</sub>)alkoxy, amino,  $-NH(C_1-C_4)$ alkyl,  $-N((C_1-C_4)$ alkyl)<sub>2</sub>, -NH(halo $(C_1-C_4)$ alkyl),  $-N(halo(C_1-C_4)$ alkyl)<sub>2</sub>,  $-N((C_1-C_4)$ alkyl)(halo( $C_1$ - $C_4$ )alkyl), ( $C_1$ - $C_4$ )alkyl, halo( $C_1$ - $C_4$ ) alkyl, hydroxy( $C_1$ - $C_4$ )alkyl-, ( $C_1$ - $C_4$ )alkoxy( $C_1$ - $C_4$ ) alkyl-,  $(C_3-C_6)$ cycloalkyl,  $(C_3-C_6)$ cycloalkyl $(C_1-C_4)$ alkyl-, heterocycloalkyl optionally substituted by one or two halogens, heterocycloalkyl(C1-C4)alkyl-, heteroaryl optionally substituted by (C1-C4)alkyl, heteroaryl( $C_1$ - $C_4$ )alkyl- optionally substituted by ( $C_1$ - $C_4$ ) alkyl, ( $C_1$ - $C_4$ )alkoxycarbonyl( $C_1$ - $C_4$ )alkyl-, — $CO_2$ H,  $-CO_2(C_1-C_4)$ alkyl,  $-CONH_2$ ,  $-CONH(C_1-C_4)$ alkyl,  $-CON((C_1-C_4)alkyl)_2$ ,  $-SO_2(C_1-C_4)alkyl$ ,  $-SO_2NH_2$ ,  $-SO_2NH(C_1-C_4)$ alkyl, or  $-SO_2N((C_1-C_4))$  $C_4$ )alkyl)<sub>2</sub>;
- or R<sup>a</sup> and R<sup>b</sup> taken together with the nitrogen to which they are attached represent a 5- or 6-membered saturated or unsaturated ring, optionally containing an additional heteroatom selected from oxygen, nitrogen, and sulfur, wherein said ring is optionally substituted 1, 2, or 3 times, independently, by (C<sub>1</sub>-C<sub>4</sub>)alkyl, halo(C<sub>1</sub>-C<sub>4</sub>) alkyl, amino, —NH(C<sub>1</sub>-C<sub>4</sub>)alkyl, —N((C<sub>1</sub>-C<sub>4</sub>)alkyl)<sub>2</sub>, hydroxyl, oxo, (C<sub>1</sub>-C<sub>4</sub>)alkoxy, or (C<sub>1</sub>-C<sub>4</sub>)alkoxy(C<sub>1</sub>-C<sub>4</sub>) alkyl-, wherein said ring is optionally fused to a (C<sub>3</sub>-C<sub>6</sub>) cycloalkyl, heterocycloalkyl, phenyl, or heteroaryl ring;
- or  $R^a$  and  $R^b$  taken together with the nitrogen to which they are attached represent a 6- to 10-membered bridged

- bicyclic ring system optionally fused to a (C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, heterocycloalkyl, phenyl, or heteroaryl ring; or a pharmaceutically acceptable salt thereof.
- 2. The compound or pharmaceutically acceptable salt according to claim  ${\bf 1},$  wherein  ${\bf X}$  is CH.
- 3. The compound or pharmaceutically acceptable salt according to claim 1, wherein  $R^1$  is hydrogen, halogen,  $(C_1-C_6)$ alkyl, halo $(C_1-C_4)$ alkyl,  $(C_3-C_6)$ cycloalkyl,  $(C_3-C_6)$ cycloalkyl $(C_1-C_4)$ alkyl, phenyl, or phenyl $(C_1-C_2)$ alkyl.
- **4**. The compound or pharmaceutically acceptable salt according to claim 1, wherein  $R^1$  is  $(C_1-C_4)$  alkyl.
- $\begin{array}{lll} \textbf{5.} & \text{The compound or pharmaceutically acceptable salt according to claim 1, wherein $R^2$ is $(C_3-C_6)$ alkoxy, $(C_3-C_6)$ cycloalkyloxy-, heterocycloalkyloxy-, heterocycloalkyl, $$-NH((C_3-C_6)$ cycloalkyl), $$-N((C_1-C_3)$ alkyl)((C_3-C_6)$ cycloalkyl), or $$-N((C_1-C_3)$ alkyl)$ (heterocycloalkyl), wherein any said $(C_3-C_6)$ alkoxy, $(C_3-C_6)$ cycloalkyloxy-, heterocycloalkyloxy-, heterocycloalkyloxy-, heterocycloalkyl, or $(C_3-C_6)$ cycloalkyl is optionally substituted 1 or 2 times, independently, by halogen, hydroxyl, $(C_1-C_3)$ alkoxy, amino, $$-NH(C_1-C_3)$ alkyl, $-N((C_1-C_3)$ alkyl)_2, $(C_1-C_3)$ alkyl, $(C_1-C_3)$ alkyl-, amino(C_1-C_3)$ alkyl-, $((C_1-C_3)$ alkyl-, $((C_1-C_3)$ alkyl-, $(C_3-C_8)$ cycloalkyl, cyano, $$-CO_2R^a$, $$-C(O)NR^aR^b$, $$-SO_2NR^aR^b$, phenyl, or heteroaryl. $$$
- **6.** The compound or pharmaceutically acceptable salt according to claim **1**, wherein  $R^2$  is  $(C_3-C_6)$ alkoxy,  $(C_3-C_8)$  cycloalkyloxy-, or heterocycloalkyloxy-, each of which is optionally substituted by hydroxyl,  $(C_1-C_3)$ alkoxy, amino,  $-NH(C_1-C_3)$ alkyl,  $-N((C_1-C_3)$ alkyl)<sub>2</sub>,  $(C_1-C_3)$ alkyl,  $-CO_2R^a$ ,  $-C(O)NR^aR^b$ ,  $-SO_2NR^aR^b$ , phenyl, or heteroaryl.
- 7. The compound or pharmaceutically acceptable salt according to claim 1, wherein  $R^2$  is cyclopentyloxy, cyclohexyloxy, pyrrolidinyloxy, piperidinyloxy, and tetrahydropyranyloxy, each of which is optionally substituted by hydroxyl,  $(C_1-C_3)$ alkoxy, amino,  $-NH(C_1-C_3)$ alkyl,  $-N((C_1-C_3)$ alkyl),  $-CO_2R^a$ ,  $-C(O)NR^aR^b$ ,  $-SO_2NR^aR^b$ , phenyl, furanyl, thienyl, pyrrolyl, imidazolyl, pyrazolyl, triazolyl, tetrazolyl, oxazolyl, thiazolyl, isoxazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, pyridinyl, pyridazinyl, pyrazinyl, or pyrimidinyl, wherein  $R^a$  is  $(C_1-C_4)$  alkyl or phenyl $(C_1-C_2)$ alkyl and  $R^b$  is hydrogen or  $(C_1-C_4)$  alkyl.
- **8**. The compound or pharmaceutically acceptable salt according to claim **1**, wherein  $R^2$  is  $(C_1-C_4)$ alkoxy, cyclohexyloxy, or  $-NR^aR^b$ , wherein said cyclohexyloxy is optionally substituted by amino,  $-NH(C_1-C_3)$ alkyl, or  $-N((C_1-C_3)$ alkyl)<sub>2</sub>.
- 9. The compound or pharmaceutically acceptable salt according to claim 1, wherein  $R^2$  is  $-NR^aR^b$ .
- 10. The compound or pharmaceutically acceptable salt according to claim 9, wherein R<sup>a</sup> is hydrogen, methyl, ethyl, cyclohexyl, tetrahydropyranyl, or piperidinyl, wherein said cyclohexyl is optionally substituted 1 or 2 times, independently, by fluorine, amino, dimethylamino, diethylamino, or morpholinyl, and wherein said piperidinyl is optionally substituted by methyl, ethyl, isopropyl, 2,2,2-trifluoroethyl, 3,3, 3-trifluoropropyl, 2-hydroxyethyl, 1,3-dihydroxypropan-2-yl, cyclopropylmethyl, (1-methyl-1H-pyrazol-3-yl)methyl, (6-methylpyridin-2-yl)methyl, 1-ethoxy-2-methyl-1-oxopropan-2-yl, or methylsulfonyl; and R<sup>b</sup> is hydrogen, methyl, or ethyl.